

REMARKS

The Office Action dated April 3, 2003 has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto. Claims 1-6 and 24 are pending in this application and are submitted for consideration.

Applicants acknowledge and thank the Examiner for indicating that claims 2-4 would be allowable over the prior art if amended to be in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants respectfully submit that all of the presently pending claims recite allowable subject matter and therefore, placing claims 2-4 into independent form is not necessary.

Claims 1, 5, 6 and 24 were rejected under the judicially-created doctrine of obviousness-type double-patenting as being unpatentable over claims 6-9 of U.S. Patent No. 5,964,195. In making this rejection, the Office Action took the position that although the conflicting claims are not identical, the claims are not patentably distinct from each other. However, Applicants respectfully submit that claims 1, 5, 6 and 24 recite subject matter that is distinct from claims 6-9 of U.S. Patent No. 5,964,195.

Claim 1 of the present invention recites a vibration sound reducing device. The device includes a vibration absorbing means which is mounted to a passage defining structure defining a liquid passage faced by at least a portion of a vibration generating section. The vibration absorbing means absorbs the vibration transmitted from the vibration generating section through a liquid in the liquid passage. The vibration absorbing means includes an occluding member mounted to an outer wall of the passage defining structure so as to occlude a through-bore, which is provided in the

outer wall of the passage defining structure and opens at an inner end thereof into the liquid passage. The vibration absorbing means further includes an elastic membrane with one of opposite surfaces thereof facing the liquid passage and the other surface thereof facing a space defined between the elastic membrane and the occluding member, and a retaining member mounted to the occluding member for retaining the elastic membrane between the retaining member and the occluding member.

Claim 24 of the present invention recites a vibration sound reducing device. The device includes a vibration absorbing means which is mounted to a passage defining structure defining a liquid passage faced by at least a portion of a vibration generating section. The vibration absorbing means absorbs the vibration transmitted from the vibration generating section through a liquid in the liquid passage. An outer wall of the passage defining structure is provided with a mounting bore which opens at an inner end thereof into the liquid passage. The vibration absorbing means includes an occluding member which is mounted to occlude the mounting bore and which includes a cylindrical support tube portion having external threads provided around an outer periphery thereof and threadedly engaged with internal threads provided on an inner surface of the mounting bore. An elastic membrane is mounted to an inner end of the occluding member with one of opposite surfaces thereof facing the liquid passage and the other surface thereof facing a space defined between the elastic membrane and the occluding member. The occluding member is provided with a recess which opens into an inner end of the occluding member to define the space, an axially extending portion of the recess being disposed in the support tube portion with an axial region where the external threads are disposed.

Claim 1 of the present invention specifically recites a vibration absorbing means including a retaining member which is mounted to an occluding member for retaining an elastic membrane between said retaining member and said occluding member. In other words, the retaining member is mounted to the occluding member and the elastic membrane is placed between the retaining member and the occluding member so that these three elements can be formed as an assembly if desired. As generally shown in Fig. 3 of the Applicants' specification, for example, the occluding member 18₁ can be mounted to the outer wall 11b with the elastic membrane 19₁ and retaining member 21₁ having been previously mounted to the occluding member 18₁. Hence mounting to the outer wall of a passage defining structure can be done very easily if the parts are assembled together previously.

By contrast, claim 6 of U.S. Patent No. 5,964,195 recites a water-cooled type internal combustion engine including a cylinder provided in a cylinder block of an engine body having a piston slidably received in the cylinder, and a cooling water passage portion surrounding the cylinder, wherein the internal combustion engine further includes a through-bore provided at that portion of an outer wall of the engine body which faces the cooling water passageway, and a vibration absorbing means including a resilient membrane disposed so that a peripheral edge of the resilient membrane does not protrude from an inner surface of the outer wall into the cooling water passageway, the resilient membrane having one surface facing the cooling water passageway and another surface facing a space area, and wherein the vibration absorbing means includes a collar press-fit to the through-hole and the resilient membrane is mounted on an outer end of the collar and spaced from the outer wall.

Claim 6 of U.S. Patent No. 5,964,195 specifically recites that the vibration absorbing means includes a collar press-fit into a through-hole provided in an engine outer wall (emphasis added) and a resilient membrane mounted on an outer end of the collar and spaced from the outer wall. The Office Action asserted that the collar and housing of claim 6 correspond to the retaining member and occluding member of the present invention. However, as discussed above, the retaining member of the present invention, as recited in claim 1, is mounted to the occluding member. Thus, the collar of claim 6 of U.S. Patent No. 5,964,195 is quite different from the retaining member of the present invention.

Claim 7 of U.S. Patent No. 5,964,195 recites a water-cooled type internal combustion engine including a cylinder provided in a cylinder block of an engine body having a piston slidably received in the cylinder, and a cooling water passageway defined in the engine body and including a water passage portion surrounding the cylinder, wherein the internal combustion engine further includes a through-bore provided at that portion of an outer wall of the engine body which faces the cooling water passageway, and a vibration absorbing means mounted to the outer wall surface of the engine body to close the through-bore, the vibration absorbing means including a resilient membrane disposed so that a peripheral edge of the resilient membrane does not protrude from an inner surface of the outer wall into the cooling water passageway, the resilient membrane having one surface facing the cooling water passageway and another surface facing a space area, and wherein the vibration absorbing means includes a collar press-fit to the through-hole and the resilient membrane is in the form

of a cup with a cylindrical wall surrounding the collar and a bottom having the one surface and the another surface.

Claim 7 of U.S. Patent No. 5,964,195 specifically recites that the vibration absorbing means includes a collar press-fit into a through-hole and that a resilient membrane is in the form of a cup with a cylindrical wall surrounding said collar and a bottom having one and another surfaces. As with claim 6, claim 7 of U.S. Patent No. 5,964,195 also requires the collar to be press-fit into a through-hole of an engine outer wall and, therefore, is different from the present invention as recited in claim 1.

With respect to claim 24 of the present invention, the Office Action pointed to claim 5¹ of U.S. Patent No. 5,964,195, stating that the open end of the housing corresponds with the occluding member and provides support for the recess defining the space of claim 24.

Applicants' claim 24 defines an occluding member which includes a cylindrical support tube portion having external threads provided around an outer periphery thereof and threadedly engaged with internal threads provided on an inner surface of a mounting bore, and an elastic membrane mounted to an inner end of the occluding member with one of opposite surfaces thereof facing the liquid passage and the other surface thereof facing a space defined between the elastic membrane and the occluding member. The occluding member is provided with a recess which opens into an inner end of the occluding member to define the space, an axially extending portion of the recess being disposed in said support tube portion with an axial region where the

¹ Furthermore, the Office Action stated that the obviousness-type double-patenting rejection was based on claims 6-9 of U.S. Patent No. 5,964,195. However, the rejection of claim 24 was asserted to be based upon claim 5. Therefore, the rejection is unclear.

external threads are disposed. An occluding member having external threads, an elastic membrane and a recess in the occluding member are typically shown, for example, in Figs. 13, 14, et seq. of Applicants' specification. Thus, Applicants respectfully submit that claim 24 defines a specific positional relationship between external threads provided around an outer periphery of a cylindrical support tube portion of the occluding member and a recess provided in the occluding member. Claims 6 and 7 of U.S. Patent No. 5,964,195 fails to disclose or suggest this claimed arrangement.

Therefore, Applicants respectfully request withdrawal of the obviousness-type double-patenting rejection of claims 1, 5, 6 and 24.

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of claims 1-6 and 24, and the prompt issuance of a Notice of Allowability are respectfully solicited.

If this application is not in condition for allowance, the Examiner is requested to contact the undersigned at the telephone listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper,

may be charged to counsel's Deposit Account No. 01-2300, r fer ncing docket
number 107348-08078.

Respectfully submitted,

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Enclosure: Petition for Extension of Time (one month)